# Enhanced Forestry Program Evaluation

## 1999

FOREST RENEWAL BC

BRITISH COLUMBIA

Ministry of Forests
Forest Practices Branch

# Executive Summary

This evaluation on Forest Renewal B.C.s enhanced forestry program was carried out in the fall of 1999. The evaluation and report were funded by FRBC through Headquarters (HQ) investments. The evaluation was conducted by MoF Forest Practices Branch staff with assistance from Regional and District staff. The evaluation focus was primarily on spacing, pruning and fertilization treatments and areas scheduled for or already treated. The purpose of the evaluation was to gather information that would identify the overall performance in the program with emphasis on forest health, priority of treatment, achievement of intended objectives and quality of the Stand Management Prescriptions. The key findings of the evaluation are:

- Forest health is an important factor to be considered in the development of Stand Management Prescriptions. Of all areas evaluated 67% had at least one significant forest health factor. Of those sites with a significant forest health factor 88% of the SMPs had satisfactorily identified and quantified the forest health factors. Negative impact to a stand due to the poor or mis-identification of forest health factors was found on only one of the treated stands. This report supports the ongoing training of forest health identification and treatment options to ensure that the latest research is appropriately applied in the field.
- The delivery of the enhanced forestry program is now almost entirely through standards agreements. This delivery system requires the Licensee to implement the program and report quality to the Ministry of Forests. The successful delivery of the enhanced forestry program relies heavily on a good working relationship. Examples of very good working relationships between the Ministry of Forests and the Licensees were found throughout the regions evaluated.
- Success of the delivery also depends on the quality inspection systems used for the various enhanced forestry activities. Further development of inspection systems supported by training will assure achievement of high quality results. The connection between the inspection systems and the prescription should be strengthened with any refinement of the inspection systems.
- The quality and use of Stand Management Prescriptions was variable. In some cases treatment prescriptions were being used for juvenile spacing treatments. Training in the content requirements and the need for SMPs should be delivered as necessary.
- Treatment priority is an issue in some districts. Where the budget is allocated to a licensee with an area based tenure it is difficult to get that money directed to areas that the district has identified as a higher priority. Budgets should be allocated to an identified work area where there are identified high priorities. When the treatment was examined on a planning area basis (TFL, woodlot or other planning area) the treatment priority was medium or higher for 86% of the areas treated.

Overall the evaluation shows a positive result. Districts and Licensees are managing well considering the large number of changes in the past few years. Some further refinement and back up training will help to achieve even better results. Workshops or seminars are recommended to refresh and update the Stand Management Prescription development process. This style of evaluation could be used by districts, regions or branches to monitor the delivery of Forest Renewal B.C.s enhanced forestry program in the future.

105-03175/

# Table of Contents

Executive Summary ..... 2
Table of Contents ..... 3
Introduction ..... 4
Evaluation Methodology ..... 4
Summary Of Evaluation Form Questions ..... 6
Review of Forest Health Findings ..... 6
Review of Forest Practice Code Compliance ..... 9
Review of Treatment Priority ..... 10
Achievement of SMP Objectives ..... 12
Quality and Content of the SMPs ..... 19
Other ..... 23
Discussion of SMP Costs ..... 23
Discussion of Treatment Costs ..... 23
Discussion on First Nations ..... 23
Options for Reducing Paper ..... 24
RMP and funding priorities ..... 24
When is a SMP required ..... 24
Recommendations/Conclusions ..... 25
Appendices
Sample treatment priority ..... 26
Standard EFP Evaluation Form ..... 27
Map of Districts Evaluated ..... 29

# Introduction

This evaluation was carried out to evaluate the performance of the Enhanced Forestry Program (EFP) funded by FRBC. The evaluation and report were funded by FRBC through Headquarters (HQ) investments. The evaluation was conducted by MoF Forest Practices Branch staff with assistance from Regional and District staff. The focus of the evaluation was on treatments to free growing stands carried out under the authority of an SMP. For FRBC funded activities the MoF is the holder of the Stand Management Prescription (SMP) and must monitor to a level that assures adequate quality has been achieved.

Projects were reviewed using a standardized evaluation form. The evaluation focus was on the broad categories of forest health, *Forest Practices Code* compliance, treatment priority (on a TSA or TFL level), achievement of SMP objectives and content of the SMP. The evaluation team was made up of district staff, regional staff, licensee staff and forest practices branch staff. In some districts the Licensee FRBC project co-ordinators also took an active role in the evaluation.

# Evaluation Methodology

Evaluations were carried out in 5 regions with two to three districts per region being evaluated. Wherever possible the evaluation was planned to occur and compliment regional monitoring that was already planned. The evaluations were carried out from early October to late December.

The evaluation areas were chosen randomly with geographic location, access and time constraints determining the final selection of 4-6 areas per district. One of the objectives of the evaluation was to have a sample without bias toward known examples of poor performance or good performance so that conclusions drawn from the evaluation would be reasonably representative of average performance. Summaries of evaluation results are presented in graphical format and are used to guide the recommendations for change or clarification where necessary.

Where possible, the evaluation team visited sample sites to verify the accuracy of the prescription information and the quality of the treatment.

**A spaced stand in the Chilcotin Forest District. Broad leafed trees are retained on tended sites to maintain tree species diversity and habitat supply.**

# Summary of Evaluation Form Questions

Charts are used to show the results of the evaluation form. Each chart is labelled with a number that corresponds to the numbers of the questions on the evaluation form. See the sample EFP Evaluation Form (appendix) for details.

# Review of Forest Health Findings

## Question 1 Are there any significant forest health factors on this treatment unit?

To determine whether a factor was significant a two-fold test was used.

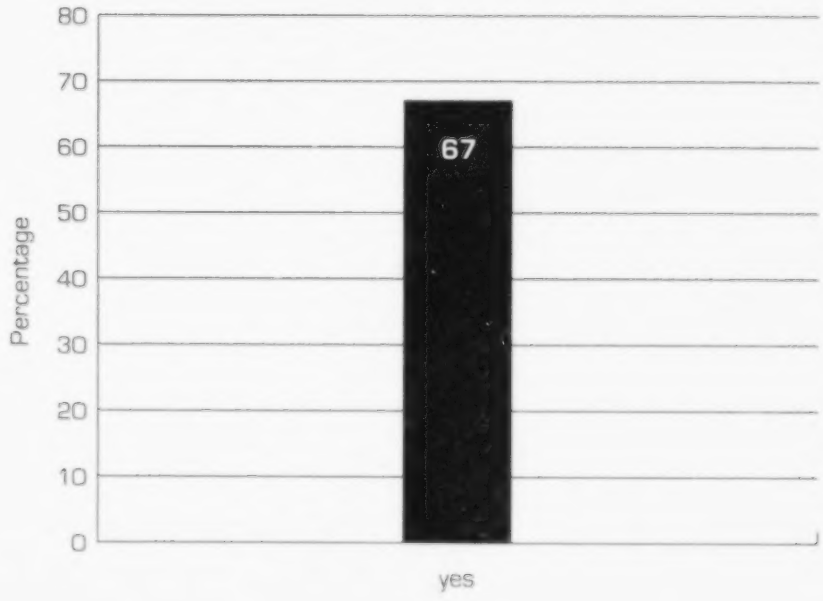
1 Is the forest health factor likely to impact future growth, mortality or form? was used together with;

2 The frequency of occurrence.

If the answer to question was yes and the occurrence was >1% the forest health factor was considered significant.

As shown in the following chart two thirds of the areas evaluated had at least one significant forest health factor. The occurrence of significant forest health factors was higher in some geographic areas than others, such as rusts in North Central B.C.

### Percentage of openings with a significant forest health factor



## **Question 2** Were all the significant forest health factors recognized, identified and adequately quantified in the SMP?

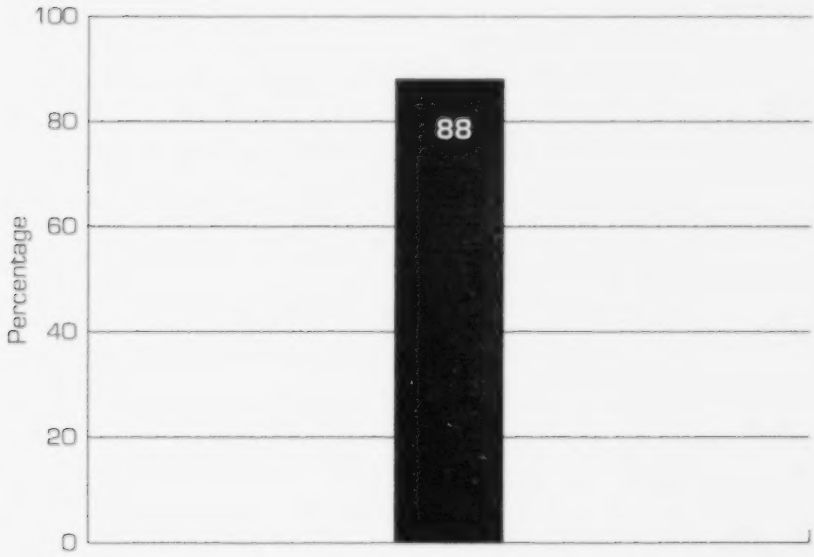
The evaluation team looked at the sites for adequate quantification and proper identification of all the forest health factors. In 88% of the areas examined the forest health factor(s) were adequately quantified and identified

In some cases not all the forest health factors were identified. This supports the need for ongoing forest health training. In depth local knowledge of the common forest health factors and the current best treatment options is critical for prescribing foresters and pre stand tending surveyors.

In some cases the quantification of significant forest health factor(s) was either higher or lower than existing levels. This is likely a result of obscure symptoms and high variability of forest health factors within a stand. Development of more refined and standardized survey procedures may help quantify the variability of stands. Where the incidence of a forest health factor was within the range of variability on a site this question was answered with a yes.

---

### Percentage of openings where all of the significant forest health factors had been adequately quantified

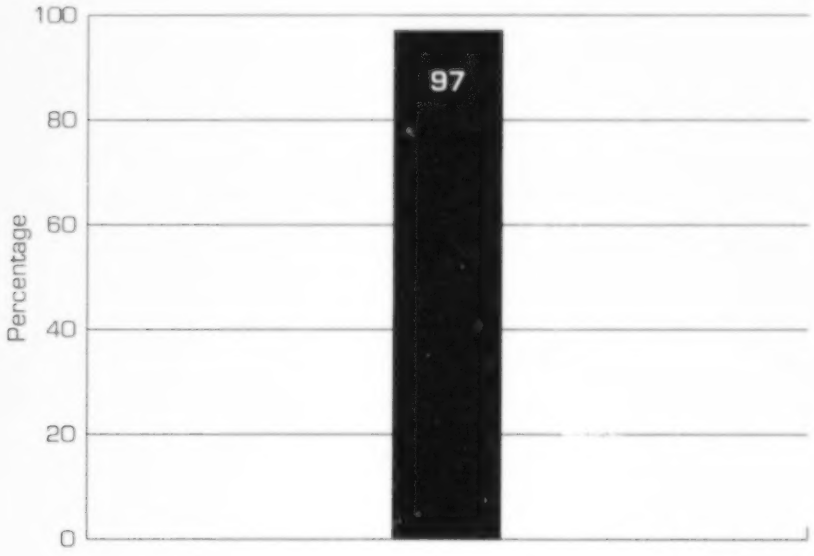


## **Question 3** Does the SMP prescribe appropriate treatment(s) to improve existing forest health conditions?

Even though forest health factors were not always correctly quantified or identified, the outcome of treating the stand almost always had or would have had a neutral effect or positive effect on the forest health factor(s).

---

**Percentage of openings where the treatment prescribed would have or did have a neutral or positive effect on the existing forest health factor(s)**



# Review of Forest Practice Code Compliance

## Question 4 Any non compliance with the Silviculture Practices Regulation and the FPC Act noted?

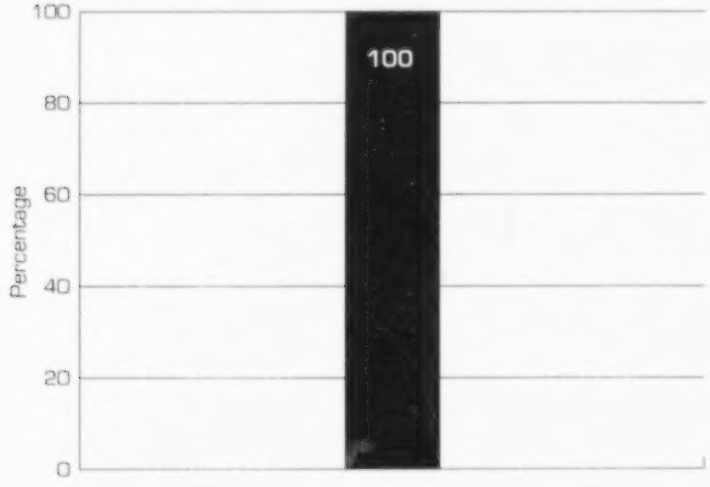
Non compliance with the Forest Practices Code was not noted. There was some confusion around the requirement for Stand Management Prescriptions. Some districts had completed treatment prescriptions for spacing stands that were not declared free growing. The legislation states that a SMP is required for treatments to free growing stands. The intent of that statement is to ensure that SMPs are not used for treatments to stands that have a basic obligation under a silviculture prescription. Once a stand is declared free growing the stand needs a SMP before incremental treatments can be carried out.

There are a number of stands that are ready for incremental treatments that originate from pre 1987 harvesting or other disturbance. These stands never had a formal free growing obligation. Therefore incremental treatments to these standards should be done under a SMP.

In most cases the "treatment prescriptions" being used for these incremental treatments had content that mirrored the content requirements for a SMP. Treatment prescriptions that have all the content requirements of the SMP can be deemed to be an SMP even though they are called something different. In most cases the only difference was that the district managers signature was missing. For the purposes of this question the use of a treatment prescription for stand tending was not considered non compliance.

**RECOMMENDATION** Districts and Licensees should review any treatment prescriptions that have been produced for incremental activities not yet carried out. If there is any SMP content missing, the content should be added. If the district manager signature is missing the district manager should sign the SMP before the work is carried out.

**Percentage of compliance with the Forest Practices Code (Non compliance not noted)**



# Review of Treatment Priority

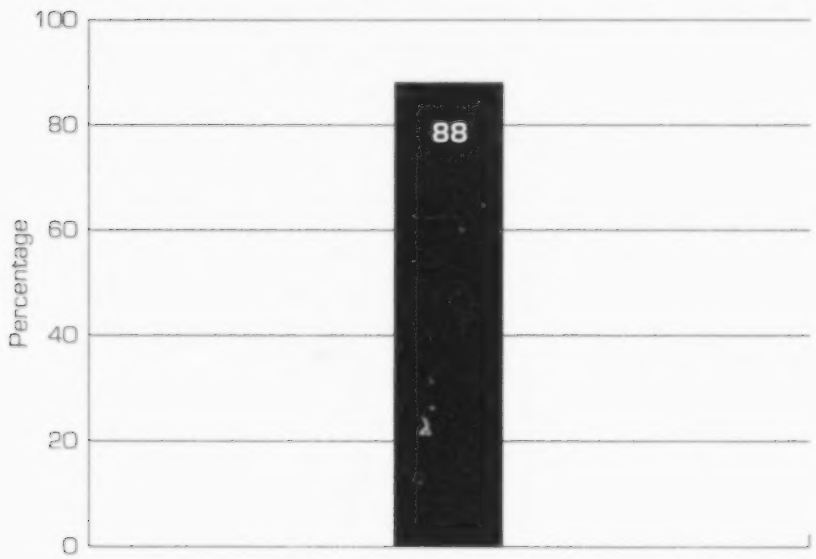
## Question 5 Is there direction for priority of treatments for this TSA (or TFL)?

This question focussed on the prioritization of work areas and the selection of stands for treatment. There was direction for priority of treatment in most districts visited. Differences of opinion arose where priorities on a district level conflicted with the choices of treatment within a planning area where a Licensee was choosing what was the highest priority within the licensee operating or planning area. Sometimes the planning areas were very small as in the case of woodlots. The allocation of money did not easily permit the completion of work on the highest district priority. Invariably money allocated to a licensee is normally spent on the licensees tenure or chart area particularly when the tenure is land based.

**RECOMMENDATION** The allocation of funds should be sensitive to the priority of work to meet timber supply objectives as well as meeting partnership agreements and other objectives. Ultimately the allocation of money should take into consideration the highest priority work from a broad management unit or landscape unit perspective.
The ongoing type 1 and type 2 silviculture strategies will help define priority areas for treatment.

---

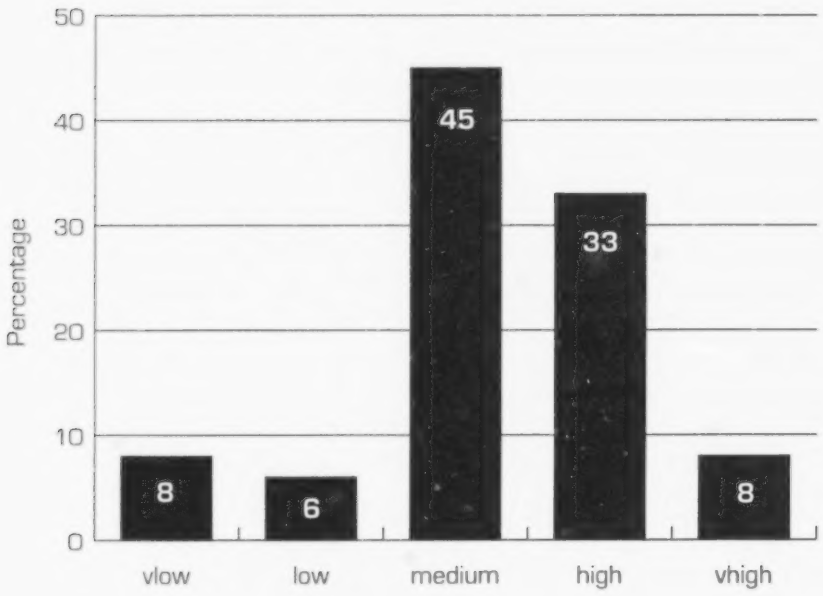
Percentage of areas with direction for priority treatments



## **Question 6** What priority is the treatment on this unit for this TSA (or TFL)?

The priority of the treatment from the evaluation teams perspective is shown in the following chart. In those cases where the priority of treatment was very low or low, the choice of unit for treatment was made for reasons other than the best silvicultural investment. In some cases the choice was the best area within the planning area. In other cases the area was chosen for treatment to satisfy research or training needs for new workers.

Priority of treatment



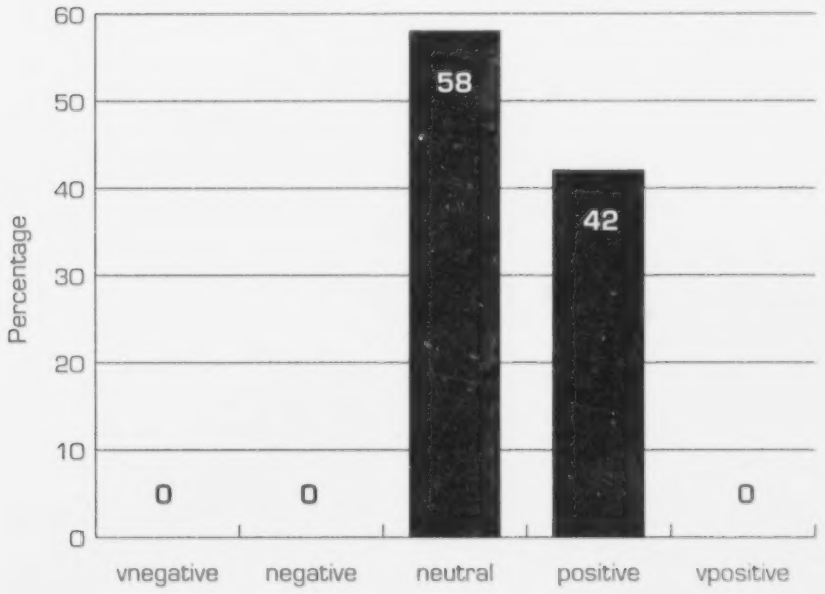
# Achievement of SMP Objectives

## **Question 7** What impact did the treatment(s) have on existing forest health conditions?

On those stands where the treatment had been carried out the impact to the current forest health conditions was positive on 42% of the sites visited. The other 58% had neutral effects on the existing forest health factors. Many treatment specifications included details on crop tree selection for reducing the incidence of a forest health factor. Cutting trees infected with Comandra rust is an example of a treatment with a positive impact.

---

Impact of treatment on forest health conditions

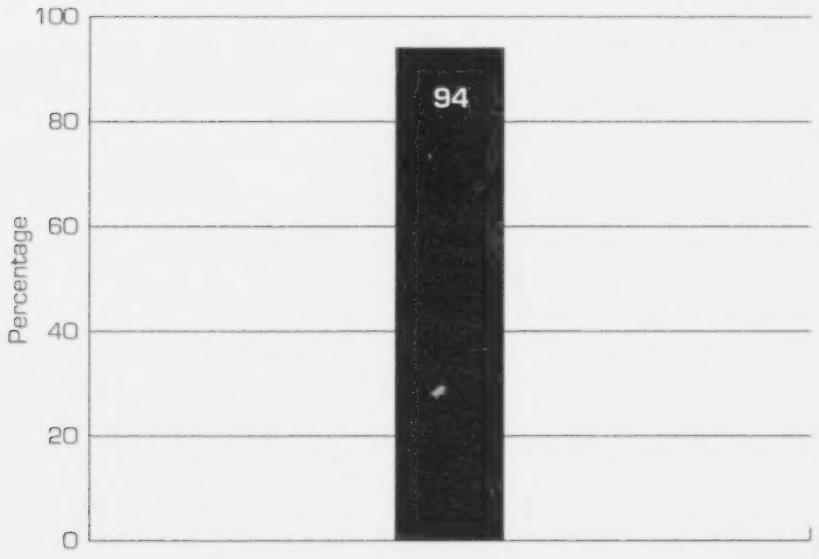


## **Question 8** Has crop tree selection criteria been met?

On 94% of the treated areas visited the crop tree selection criteria was considered met (30/32 sites visited).

---

### Percentage of treated area where crop tree selection criteria was met



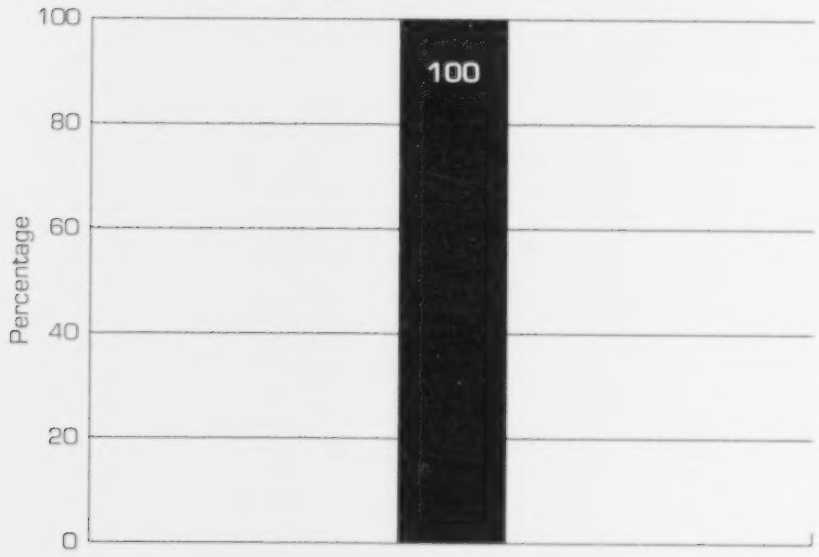
Some poor crop selection was found (low incidence).

## **Question 9** Have other resource management objectives been met (as identified in the SMP)?

Of those areas that were treated, 100 percent had followed the other resource management objectives identified in the SMP.

---

### Percentage of treated areas where other resource management objectives were met

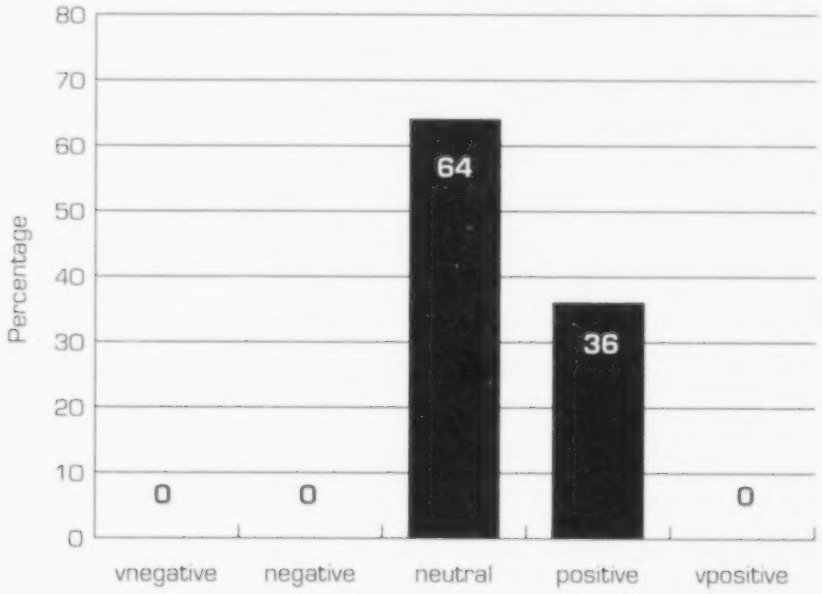


## **Question 10** Have other resource management objectives been impacted?

This question looked at the impact the treatment had on non-timber forest resources. 100% of the treatments had a neutral or positive impact on non-timber forest resources.

---

### Impact of treatment on other resource management objectives

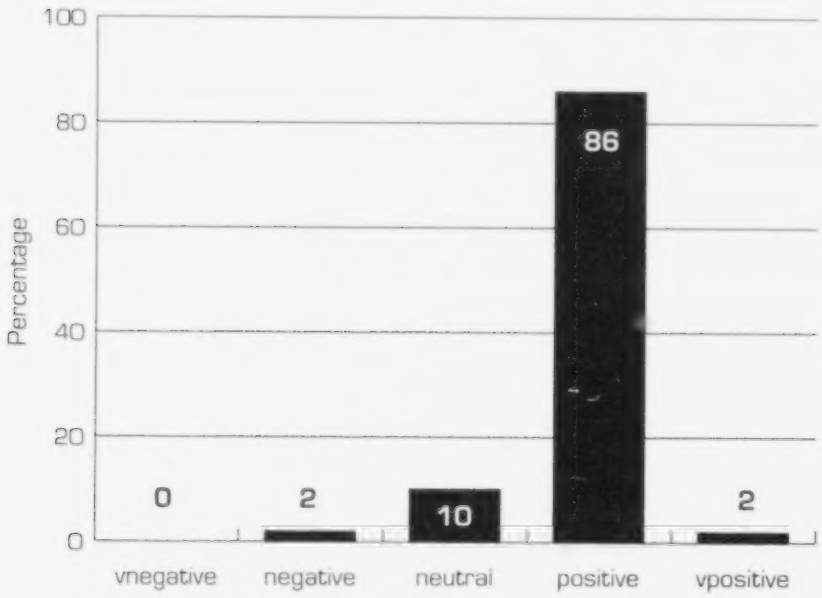


## **Question 11** What is the overall impact on future yield or yield of product?

The vast majority of the treatments did have or would have had a positive impact on the future merchantable yield or final stand harvest values. Of the units sampled only one was felt to have had a negative impact. Two units were rated negative+ and were recorded as neutral impact.

---

### Impact of treatment on future yield of product



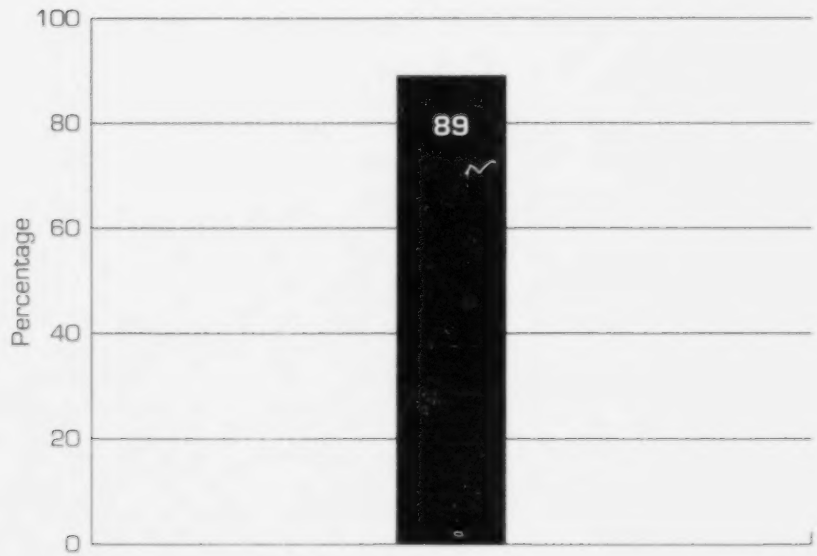
## **Question 12** Is the quality of the treatment high enough to be considered acceptable quality?

This question was asked to determine if the quality of treatment was to a high enough standard. If the treatment quality was >85%, The treatment was considered satisfactory. Some of the stands that were considered <85% quality were a result of poor crop tree selection. This is a non-reworkable error and fortunately was rare. Those cases where this was found were possibly a result of an inexperienced crew that needed a higher level of supervision. 31/35 stands had acceptable quality. 2/35 were substandard and not reworkable. 2/35 were substandard and reworkable.

**RECOMMEND** that, where the experience level of a crew is low, the licensee supply adequate supervision and training to ensure that the level of work is higher than 85%. It is also critical that the licensee advise the MoF of any non-reworkable errors on any portion of the work area. In some cases the Ministry had not been notified of the poor quality as required by the Ministry of Forests standards agreements. In one case of unsatisfactory work the MoF had not yet received the final report and the quality problem was reworkable. In this case the shortfall could have been corrected prior to submission of the required report and may have been corrected prior to a routine district inspection.

---

**Percentage of treated areas where quality of treatment was acceptable or better**



# Quality and Content of the SMPs

## Content not required by the Code

Some of the prescriptions contained content not required by the OPR. In some cases this extra information proposed obligations that could be interpreted as committing to future obligations. For example some SMPs used the wording that an "area will be surveyed for forest health in three years."

The intent to survey can be communicated to planners without creating the sense of an obligatory requirement that may or may not be carried out. One suggestion is to reword the statement to "A forest health survey should be carried out three years after treatment." Alternatively the intent to survey could be stated in a standards document produced for the area to be treated. Such a standards document would contain standards for the treatment that are not part of the legal content requirements for a SMP.

## Year of treatment

The year of treatment was listed in some SMPs without a range of years. The Operational Planning Regulation states that the SMP does not need to list the year of treatment unless the treatment will be carried out more than 3 years from the date of approval, in which case a range of years should be specified. Entering a single year that is less than 3 years from the date of approval is unnecessary and may lead to confusion or necessitate amendment of the SMP if the treatment is carried out in another year.

Training would help improve SMPs by making them more flexible and easier to comply with.

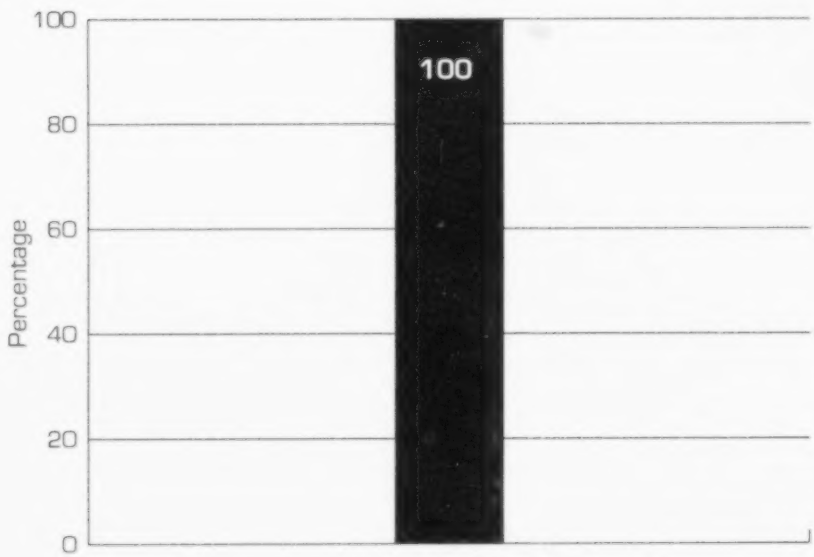
A multi-storey Douglas-fir stand in the Williams Lake Forest District

## **Question 13** Does the SMP meet the content requirements of the *Operational Planning Regulation*?

The SMPs reviewed met the content requirement of the Operational Planning Regulation. The review did pick up on some items that would help in the delive. There is a tendency for the SMPs to include content not required under the legislation. This content is useful information and should be attached to the SMP as a supporting document. This additional information normally contains details that guide the treatment but are not necessary content requirements. This information could be attached as a separate document to the standards agreement and would have to be met contractually under that agreement.

---

### Percentage of SMP's that met the content requirements of the *Operational Planning Regulation*



## **Question 14** Have other resource management objectives been adequately identified and incorporated into the SMP and treatment specifications?

Other resource management objectives were incorporated into the SMPs reviewed. Biodiversity and wildlife objectives were incorporated through the use of wildlife tree retention and broadleaf tree retention. The detailed treatment specifications were normally obtained through discussion and referral to the local Forest Ecosystem Specialist.

Many of these objectives are best managed at a landscape level and may be better detailed in landscape level plans in the future.

---

### Percentage of SMP's that adequately identified and incorporated other resource management objectives into the SMP

# Other

## Discussion of SMP Costs

Although not specifically examined in this evaluation the issue of SMP costs came up in discussion. On one particular unit the cost of producing the SMP was $135 per hectare. This cost was on an area of 87.4 hectares for a unit total of $12,000. It may be argued that $135/ha is not unreasonable for a small unit; however for an area this large, the costs should be significantly lower.

Further investigation is required to determine if very high costs for SMPs is common or if the examples cited were uncommon occurrences.

Other efficiencies should be examined for reducing the costs of producing the SMP. It may be possible to take better advantage of the allowance for multi-area SMPs and explore legislative changes that would allow for a one plan approval approach. One plan approval is being considered for SPs and could be developed for SMPs with future Act and regulation changes.

## Discussion of Treatment Costs

Although not part of this evaluation, treatment costs did come up during inspections and will be discussed briefly in this section. Cost of treatment was highly variable and in some cases was significantly higher than historical costs. Reasons offered for this were direct award and partnership agreements. Although these reasons may have contributed to the increase in costs there were some areas where costs had been controlled by the Licensee through an effective cost estimate and negotiation.

A licensee working in Ft. St. James district had kept costs to a market value price through an independent process of cost estimates. Prior to negotiating with the partner for enhanced forestry work the licensee pays for an independent cost estimate from silviculture contractors. The contractors who supplied the estimate were paid for their time in producing the estimate. The estimators were told that they may have a chance of getting the work if the work was refused by the partner. The cost estimates were for multiple work areas and included production estimates for individual workers.

## Discussion on First Nations

The evaluation team found that significant amounts of work, up to 80% in some districts, was undertaken by First Nations workers and contractors. The Licensees were directly involved in training and supporting these crews. This level of support was required if the crew turn over rate was high. Where there was insufficient training and support, the evaluation noted problems with project implementation and costs. Where Licensees or the Ministry had spent a sufficient amount of time training and supporting crews, there were very successful, highly qualified and cost effective First Nations crews.

## Options for Reducing Paper Work

Very few licensees were taking advantage of the ability to have multi-area SMPs. Multi-area SMPs were added to the FPC Act and enabled in the SPR in 1998. It may be that the concept is new and will take a while to gain acceptance in the districts. Recommend that training be supported to encourage the use of multi-area SMPs.

Development of policy that would allow a one plan approval concept could further reduce paper work.

## RMP and funding priorities

The Resource Management Planning process has helped to focus treatments on the highest priority areas. In some cases the requirements of the RMP do not match well with the funding allocation. There needs to be a direct link between the funding decisions made at the RMP to the allocation of funding. The decisions to allocate funding are more complex than just selecting the best silvicultural investment. Once the funding allocation decisions are made, the decision to treat should be based on whether it is the best silviculture investment in the area. This will be a combination of the best return and the best strategy for timber supply mitigation where a short or mid term fall down has been identified.

## When is a SMP required?

The evaluation team found that some treatments were being carried out on stands that, because of high initial density, were considered not free growing. The treatment proposed for these areas was a spacing treatment. A treatment prescription was in place instead of a SMP for some of these areas. An examination of these prescriptions revealed a document that had the content requirements of a SMP except for the signature of the district manager. These prescriptions could be considered SMPs even though they were not specifically called an SMP.

Clarification of this point should be made so that prescription writers know that when they are writing a spacing prescription they need a SMP (unless the stand is not free growing and it is being treated as a basic obligation under a SP).

A SMP should be used for spacing, pruning, or fertilizer treatments to stands that are free growing in the sense that no free growing obligation exists on the area. In the case of treatment to a stand that was harvested prior to October 1, 1987 there never was a free growing obligation and it is recommended that a SMP be used.

For stands that are stocked and not free growing (backlog brushing/conifer release) a treatment prescription is sufficient. A SMP is not required; however could be used to prescribe treatments to these stands.

# Recommendations/Conclusions

1 Forest health factors were adequately quantified 88% of the time. On those blocks where the forest health factors had not been adequately identified the potential of doing stand damage is high.

**RECOMMEND** ongoing forest health training for all those involved with prescription development and implementation of enhanced forestry projects. Regional forest health staff should identify areas of need through monitoring and ensure the training is offered to the appropriate audience. Training should be offered locally and should be subsidized to ensure attendance.

2 Stand Management Prescriptions were not always being produced for spacing, pruning or fertilization treatments. There appeared to be some confusion as to when a SMP is required.

**RECOMMEND** that Districts and Licensees should be notified of the intent of the legislation for an approved SMP to be in place for all areas that are being spaced, pruned or fertilized.

3 The evaluation form used for this evaluation was a useful checklist for evaluating the enhanced forestry program.

**RECOMMEND** that the evaluation form (or modified version) be used for ongoing regional monitoring

4 The evaluation team came across some large variations in costs that could not be explained by site factors alone.

**RECOMMEND** that licensees adopt the Ministry tendering procedures for projects that will be tendered.

**RECOMMEND** for projects that will be direct awarded, and there is no accurate cost estimates, the licensee should follow the estimating procedures detailed in the section "Discussion of Treatment Costs" above.

5 Where SMP areas are large the costs of preparing the SMP should reflect a price that takes into account economy of scale.

**RECOMMEND** the price for these large area SMPs be compared to other areas that reflect an accurate cost estimate. Further cost savings may be realized if the ability to build multi-area SMPs is encouraged.

6 Costs for SMP's were, in some cases, very high.

**RECOMMEND** that alternatives to reduce costs for SMP's be explored. Viability of a One Plan approach should be examined.

# Sample Treatment Priority

**Potential Treatments to Increase Timber Quantity**

**Planting with Genetically Improved Stock**: All areas harvested in TFL 19 are usually reforested within one year of harvest. Areas are planted with genetically improved seedlings when available. All Fd and most of the Hw seedlings planted in TFL19 are from genetically improved seed with anticipated gains in volume yields from 9% in Fd and 7.5% in Hw. There are no (or very little) areas of backlog reforestation required within TFL 19.

**Juvenile spacing:** Stands will be assessed for potential spacing where stands exhibit competition for growing space. Potential candidate stands for juvenile spaced should have the following attributes:

1). Densities greater than 3,000 sph
2). Hw,Fd stands with > 2,500 sph
3). Average Age 12 - 18 yrs
4). Average Height 3 - 8 metres
5). Site Index >25

Stands will generally be spaced to 1,000 sph (1,200 sph in HwCw salal areas, and at higher snowpack areas). This will allow for commercial thinning opportunities when stands are 35 to 45 years old.

It is expected that 10 to 15% of regenerated stands will be spaced. Juvenile spacing activities are dependent on FRBC funding.

**Fertilization:** Many second growth stands on TFL 19 are being fertilized at the time of planting. This helps seedlings achieve free growing sooner thereby minimizing brushing costs.

Post free growing stands will be assessed for fertilization and should have the following attributes:

1). Fd stands or stands with at least 20% Fd mixed (1st priority)
2). Hw Cw salal sites (2nd priority)
3). Spaced and/or pruned stands on medium to poor sites.
4). Second growth Fd stands that are < 10 years from harvest.
5). Stands that require green up in order to harvest adjacent timber.
6). Fertilization within pruned stands may be done manually at time of pruning. This will reduce the amount of "wasted" fertilizer, and provide increased benefits to pruned stems.

Candidate stands will be fertilized using nitrogen in the form of urea pellets applied at a rate of 435 kg/ha using aerial methods. Cw Hw salal sites will be fertilized using a nitrogen/phosphorus blended mix. Post free growing fertilization activities are dependent on FRBC funding.

## 2.2) TIMBER QUALITY

It is expected at rotation, the average DBH of second growth stands will be in the 35 - 50 cm range. This is much smaller that the average DBH of many of the old growth stands currently being harvested. It is expected that many of these second growth stands will not have the same amount of clear (knot free) wood as the old growth. Although future markets can not be predicted with any certainty beyond five years, it is expected that some knot free wood will always be in demand.

**Opportunities to Increase Timber Quality**

Pruning can increase timber quality by minimizing the knotty core and providing clear wood.

**Potential Treatments to Increase Timber Quality**

**Pruning:** Stands will be assessed for potential pruning based on the following attributes:

1). Spaced stands composed primarily of Fd and Hw.
2). Concentrate pruning on sites with a high SI. (SI > 25)
3). 1st lift pruning (3 metres) on stands that are on average at least 6 m tall.
4). 2nd lift pruning (5.6 m) on stands that are on average at least 10 metres tall.
5). Individual stem diameters should be less than 15 cm (DBH 1st lift and at 3 m height on 2nd lift)

Candidate stands should have between 400 and 600 sph pruned. 40% live crown will be retained on Hw, and a minimum of 3 whorls will be retained on Fd. Pruning activities are dependent on FRBC funding.

**Sample Questionnaire**

**Standard EFP Evaluation Form**

# Enhanced Forestry Evaluation Form

| | | |
|---|---|---|
| **Area Inspected** | | Insp. Date: |
| District: | | |
| Location: | | |
| **Inspected by:** | Name | Name |
| | | |
| | | |
| | | |

| | | |
|---|---|---|
| | **Forest Health** | |
| 1 | Are there any significant forest health factors on this treatment unit? If yes, answer the questions following in the forest health section. If no, go to next section. | Yes ☐ or No ☐ |
| 2 | Were all the significant forest health factors recognized, identified and adequately quantified in the SMP? If No attach details on a separate sheet. | Yes ☐ or No ☐ |
| 3 | Does the SMP prescribe appropriate treatment(s) to improve existing forest health conditions? | Yes ☐ Neutral ☐ No ☐ |
| | | |
| | ***Forest Practices Code* compliance** | |
| 4 | Any non compliance with the *Silviculture Practices Regulation* and the *FPC Act noted*? Attach details if any non compliance noted. | Yes ☐ or No ☐ |
| | | |
| | **Treatment Priority (TSA or TFL level)** | |
| 5 | Is there direction for priority of treatments for this TSA (or TFL)? | Yes ☐ or No ☐ |
| 6 | What priority is the treatment on this unit for this TSA (or TFL)? | VLo ☐ Lo ☐ M ☐ Hi ☐ VHi ☐ |
| | | |

| | Achievement Of The SMP Objectives | If area untreated, leave this section blank. |
|---|---|---|
| 7 | What impact did the treatment(s) have on existing forest health conditions?<br>N/A ☐ | ☐ ☐ ☐ ☐ ☐<br>Vneg negative neutral positive Vpos |
| 8 | Has crop tree selection criteria been met? | Yes ☐ or No ☐ |
| 9 | Have other resource management objectives been met (as identified in the SMP)? If no, answer next question. | Yes ☐ or No ☐ |
| 10 | Have other resource management objectives been impacted? | ☐ ☐ ☐ ☐ ☐<br>Vneg negative neutral positive Vpos. |
| 11 | What is the overall impact on future yield or yield of product? | ☐ ☐ ☐ ☐ ☐<br>Vneg negative neutral positive Vpos. |
| 12 | Is the quality of the treatment high enough to be considered acceptable quality? | Yes ☐ or No ☐ |
| | | |
| | **Quality And Content Of The SMP.** | |
| 13 | Does the SMP meet the content requirements of the *Operational Planning Regulation*? | Yes ☐ or No ☐ |
| 14 | Have other resource management objectives been adequately identified and incorporated into the SMP and treatment specifications? If No, attach details on a separate sheet. | Yes ☐ or No ☐ |

Comments:

**DISTRICTS EVALUATED, 1999**

Mackenzie Forest District
Fort St. James Forest District
Quesnel Forest District
Chilcotin Forest District
Williams Lake Forest District
Penticton Forest District
Kamloops Forest District
North Coast Forest District
Kalum Forest District
Campbell River Forest District

## Map of Districts Evaluated